

Local Application Parameters

Page application

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Local applications are a method of adding new features to the local station software without being linked in with the system code. Each entry in the Local Applications Table LATBL contains the context for an invocation of a local application. This can permit a single LA to be invoked multiple times using different parameter values. It is analogous to calling a procedure with different arguments passed. This page application allows viewing and modifying the parameters of LATBL entries in any local station.

Page layout

An example of the LA used for rf conditioning is as follows:

```
E LOC APPL PARAMS 12/12/91 1228
NODE<062A>  NTRY< 6>
NAME=KRMP   CNTR=0FE8
TITL"RF CAVITY CONDITIONING  "
SVAR=000473F8
ENABLE  B<0530> KLY RF RAMP ENBL
SPARKS  B<01A8> WG REFL ENERGY
RFONST  B<01A5> LLRF DISABLED
RFINTLK B<010C> A0 INTERLK RESET
PPWR    C<01F0> KAWG1P          MW
VACUUM  C<008E> KAV1            V
RADTION C<0006> SACVRD          R/H
RFRESET B<0086> RF RESET
EVENTS  B<0180> CLK EVT 18
OTHERS  C<01F1> KATRG1P        MW
```

Enter the target node and LATBL entry# (range 0–31) and interrupt. That entry is displayed and presented for editing. If the CNTR word is counting, the LA is currently active and is being called at 15 Hz. The name of the LA, a title that describes its function, and the current ptr to the static variables of that LA used by the entry are shown. The remainder of the display shows up to 10 words used as parameters.

Each parameter line shows some prompt text which is a reminder of its use, where a B or C suffix means that the parameter is actually a Bit# or Chan#, respectively. In either of these two cases, the Bit text or the Chan name/units are shown to the right to verify the parameter word's significance.

Text database

As each new local application is written, another portion of a "text file" should be added. The text file is actually a named "program" called HELPLOOP. It is prepared with the MPW assembler and downloaded in the usual way. A key is used at the start of each program's text info to allow variable length entries. Each

from the portion used for the KRMP example is as follows:

```
DC   'L***KRMP', 'RF CAVITY CONDITIONING  '  
DC                                     'ENABLE B', 'SPARKS B'  
DC   'RFONST B', 'RFINTLKB', 'PPWR   C', 'VACUUM C'  
DC   'RADTIONC', 'RFRESETB', 'EVENTS B', 'OTHERS C'
```

The first 4 characters are the key used to identify the presence of the 4-character name of the LA. After the name is a 24-character LA title to denote the LA's function. Then each parameter uses an 8-character prompt text, which denotes the parameter's function. If the 8th character is a B or a C, then the parameter is either a Bit# or a Chan#; otherwise, all 8 characters can mean the prompt text. (The layout of the parameters above corresponds to the usual appearance of an LATBL entry as viewed on a memory display page.) Unused parameters on the end need not be included.

The text file is first looked for in the local station which is running this page application. If it is not found there, it looks up the copy in node 0576. It searches for a match on the name and displays the prompt text for each parameter.

Making changes

Type in new values for the parameter words and interrupt on each one. The display will be updated to reflect any changed Chan or Bit text. type in a new name and interrupt, and the title and parameter prompt text will be changed accordingly. Type a new node# and/or entry# to move to a new LATBL entry. The raise/lower buttons can be used to adjust the entry#.

Program stats

The LAPP page application is about 800 lines of Pascal running in 5K bytes.